CESAD-PDS-P 9 Sept 2008

MEMORANDUM FOR COMMANDER, Jacksonville District, ATTN: CESAJ-PD

SUBJECT: Approval of Revised Peer Review Plan (PRP) for the Jacksonville Harbor, FL Navigation Project General Reevaluation Report (GRR) Phase 2

#### 1. References:

- a. Memorandum, CESAM-PD-FP, 12 Aug 2008, Subject: Approval of Revised Peer Review Plan (PRP) for the Jacksonville Harbor, FL Navigation Project General Reevaluation Report (GRR) Phase 2
- b. EC 1105-2-408 Peer Review of Decision Documents, 31 May 2005.
- c. CECW-CP Memorandum, 30 March 2007, subject: Peer Review Process.
- d. Supplemental information for the "Peer Review Process" Memo, dated March 2007.
- 2. In accordance with EC 1105-2-408, "Peer Review of Decision Documents," the revised PRP for the Jacksonville Harbor GRR Phase 2 has been coordinated and developed with the PCX-DDN. The plan as prepared has been reviewed by this office and is approved.
- 3. We concur with the conclusion that external peer review (EPR) of this project is required due project cost in excess of \$45,000,000. Other requirements that could lead to EPR are: (1) novel subject matter will be produced by the report, (2) controversial subject matter exists to include but not limited to environmental impact of modifying / deepening the Jacksonville navigation channel, (3) subject matter is precedent-setting, (4) interagency interest is significant, and (5) there are significant environmental or social effects to the nation. While none of these specific triggers apply to this Project, as the cost of the project is in excess of \$45,000,000 External Peer Review is required. The PRP complies with all applicable policy and provides for adequate independent technical review of the plan formulation, engineering, and environmental analyses, and other aspects of the plan development. Non-substantive changes to this PRP do not require further approval.
- 4. The district should take steps to post the PRP to its web site and provide a link to the PCX-DDN for their use. Before posting to the web site the names of Corps/Army employees should be removed in accordance with reference 1.d. above.

1

5. The SAD point of contact is Mr. Terry Stratton, CESAD-PDS-P.

FOR THE COMMANDER:

WILBERT V. PAYNES

Chief, Planning and Policy Community of Practice

9/26/2008

2

# FINAL PEER REVIEW PLAN FOR

Jacksonville Harbor, FL Navigation Project General Revaluation Report (GRR) 2 April 2008

For questions or comments regarding this Peer Review Plan, please forward your comments to:

Title	Telephone	Email
Project Manager	904-232- 1363	Click here to email Project Manager

THE INFORMATION CONTAINED IN THIS PEER REVIEW PLAN IS
DISTRIBUTED SOLELY FOR THE PURPOSE OF PREDISSEMINATION PEER
REVIEW UNDER APPLICABLE INFORMATION QUALITY GUIDELINES. IT HAS
NOT BEEN FORMALLY DISSEMINATED BY THE U.S. ARMY CORPS OF
ENGINEERS, JACKSONVILLE DISTRICT. IT DOES NOT REPRESENT AND
SHOULD NOT BE CONSTRUED TO REPRESENT ANY AGENCY
DETERMINATION OR POLICY.

# FINAL PEER REVIEW PLAN

for

Jacksonville Harbor, FL Navigation Project General Revaluation Report (GRR) 2 April 2008

#### 1. PURPOSE

This Peer Review Plan (PRP) provides a technical peer review mechanism ensuring quality products are developed during the course of the study by the Jacksonville District (SAJ). All processes, quality control, quality assurance, and policy review will be done to complement each other producing a review process that identifies and resolves technical and policy issues during the course of the study and not during the final study stages.

The PRP is intended to describe the processes that will be implemented to independently (of the Project Team) evaluate the technical sufficiency of the planning study. The PRP is a collaborative product of the Project Delivery Team (PDT) and the National Deep Draft Navigation Planning Center of Expertise (DDNPCX). The DDNPCX shall manage the peer review processes, which for this study includes an Independent Technical Review (ITR) and an External Peer Review (EPR).

ITR is a critical examination by a qualified person or team, predominantly within the Corps of Engineers (Corps), which was not involved in the day-to-day technical work that supports a decision document. ITR is intended to confirm that such work was done in accordance with clearly established professional principles, practices, codes and criteria informed by Engineering Regulation (ER) 1105-2-100.

EPR is in addition to ITR, and is added to the Corps existing review process in special cases where the risk and magnitude of the proposed project are such that a critical examination by a qualified person or team outside of the Corps and not involved in the day-to-day production of a technical product is necessary. EPR will similarly be added in cases where information is based on novel methods, presents complex challenges for interpretation, contains precedent-setting methods or modes, presents conclusions that are likely to change prevailing practices, or is likely to affect policy decisions that have a significant impact. In the absence of the above-described criteria, high project cost may, by itself, necessitate EPR.

#### 2. REFERENCES

ER 1105-2-100, "Planning Guidance Notebook
EC 1105-2-408, "Peer Review of Decision Documents", dated May 31, 2005
CECW-CP Memorandum, "Peer Review Process", dated March 30, 2007
Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, Chapter II - (National Economic Development NED) Benefit Evaluation Procedures (March 10, 1983).
EC-1105-2-407 "Planning Models Improvement Program - Model Certification"

1

9/26/2008

#### 3. PROJECT/STUDY BACKGROUND

Jacksonville Harbor is in Duval County, Florida and at the mouth of the St. Johns River where it empties into the Atlantic Ocean (Figure 1). The harbor project provides access to deep draft vessel traffic using terminal facilities located in the City of Jacksonville, Florida (Figure 2).

A resolution form the Committee on Public Works and Transportation, United States House of Representatives, dated February 5, 1992, provides the study authority as follows:

"Resolved by the Committee on Public Works and Transportation of the United States House of Representatives, That the Board of Engineers for Rivers and Harbors, is requested to review the report of the Chief of Engineers on Jacksonville Harbor, Florida, published as House Document 214, Eighty-ninth Congress, First Session, and other pertinent reports, to determine whether modifications of the recommendations contained therein are advisable at the present time, in the interest of navigation and other purposes."

Also,

Energy and Water Development Appropriations, 2003, United States House of Representatives, House Report 107-681 and the Senate explanatory statement as delineated in the Congressional Record of January 15, 2003, pages S492 through S546. That Congressional language authorized the US Army Corps of Engineers to conduct a study as follows: "The amount provided for the Jacksonville Harbor, Florida, project includes \$500,000 for the Corps of Engineers to complete plans and specifications for the proposed extension of the channel and initiate a General Reevaluation Report regarding further improvements."

The District, in coordination with South Atlantic Division, determined that further study in the nature of a General Reevaluation Report will fulfill the intent of the study authority and assess the extent of the Federal interest in participation in a solution to the identified navigation problems based on results of a Vertical Telephone Conference (VTC) referenced by Jacksonville District with South Atlantic Division at the Quarterly CESAD meeting in Jacksonville District on 19-20 Nov 03. The VTC indicated that the GRR for Jacksonville Harbor should proceed upon execution of a 50/50 type Cost Sharing Agreement (CSA) and Project Management Plan (PMP).

The purpose of the General Reevaluation Report (GRR) 2 is to determine the possibility of deepening Jacksonville Harbor to a proposed project depth of 45 feet. Examination of 1-foot incremental depths from the existing project depth of 40 feet up to a possible 50-foot depth would include a study area from the entrance channel to river mile 20 or the end of the Jacksonville Port Authority Talleyrand Terminal. The St. Johns Bar Pilots have requested evaluation of channel widening along the Trout River Cut Range and St. John's Bluff Reach Range (Potential widening is separately under investigation for the Short Cut Turn and Training Wall Reach areas as a possible modification under another,

related study, the Jacksonville Harbor (Mile Point) Feasibility Study). Disposal of dredged material will also receive consideration. Expansion of existing confined disposal facilities (CDFs), evaluation of new upland disposal sites, placement of beach quality material in near-shore areas or on beaches south of the south jetty, continued use of beneficial use sites for recycling of dredged material, and possible expansion of the Ocean Dredged Material Disposal (ODMDS) site will receive consideration.

The Federal objective of water and related land resources planning is to contribute to National Economic Development (NED) consistent with protecting the nation's environment, in accordance with national environmental statutes, applicable executive orders, and other Federal planning requirements. Planning objectives of the proposed study will involve the use of available information and hydrodynamic modeling from the current Jacksonville Harbor Mile Point feasibility study as a basis for additional evaluation of navigation improvements from the entrance channel to river mile 20 of Jacksonville Harbor. Specific planning objectives for the reevaluation of Jacksonville Harbor include:

- Decrease transportation costs associated with existing commercial ship delays from light loading, use of high tides;
- Provide for the navigational safety;
- Develop the most cost effective means for disposal of new construction and maintenance dredged material over the 50-year project evaluation period;
- Integrate beneficial uses of dredged material such as manufactured soils, recycling of dredge material for construction fill, development of artificial reefs, or use of beach quality material for placement along adjacent beaches as part of a least cost dredged material management plan over the economic life of the project;
- Identify the NED plan for Jacksonville Harbor which most efficiently and safely accommodates existing and larger commercial ship and barge traffic while avoiding or minimizing impacts to environmental resources.

#### The Project Delivery Team

Project Manager	Civil Engineer	Jacksonville District
Planning Technical Lead	Civil Engineer	Jacksonville District
Engineering Technical Lead	Civil Engineer	Jacksonville District
Geotechnical Analysis	Geologist	Jacksonville District
Cost Engineering	Cost Engineer	Jacksonville District
Hydrodynamic Modeling	Hydraulic Engineer	Jacksonville District
Environmental Analysis	Biologist	Jacksonville District
•	Real Estate	Jacksonville District
Real Estate Evaluation	Specialist	
Economic Analysis	Economist	Jacksonville District
Construction/Operations	Civil Engineer	Jacksonville District
Legal Evaluation	Attorney	Jacksonville District

#### 4. PLANNING MODEL APPROVAL/CERTIFICATION

It is our understanding that all models that will be employed for this project have been approved for use. They are listed, below.

#### **Engineering Model Studies**

- (a) Hydraulic Modeling: TAB System Models (RMA2 and 10). Hydraulic modeling was performed in-house, by the Jacksonville District Engineering Division, Waterways Modeling Section (EN-WM).
- (b) Ship Simulation Model, performed by the Corps of Engineers Engineering Research and Development Center (ERDC), Vicksburg, MS.

#### **Economic Studies**

The commercial navigation benefit study conducted during the feasibility study phase will evaluate the transportation benefits for potential modifications to the Federal deep-draft navigation project at Port Everglades. The methods for assessing benefits are documented in the Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, Chapter II - (National Economic Development NED) Benefit Evaluation Procedures (March 10, 1983). The adopted procedures for USACE studies, associated with deep-draft navigation features of water resources plans and projects consist of Section VII of Engineering Regulation (ER) 1105-2-100.

A spreadsheet model was employed for economic benefits evaluation. The spreadsheet was reviewed, and approved for use by the DDNPCX.

# 5. INDEPENDENT TECHNICAL REVIEW PLAN

ITR is a continuous process, initiated early in the study process with at least four key points, to ensure the proper application of appropriate regulations and professional procedures. ITRs are typically performed at two Corps vertical team review points interim to the Draft Report: the Feasibility Scoping Meeting (FSM) and Alternative Formulation Briefing (AFB). Subsequently the draft and final reports are reviewed.

Skilled and experienced personnel who have not been associated with the development of the study products perform the ITR. ITR team members may be employees of U.S. Army Corps of Engineer Districts, other Federal agencies, state or local government agencies, universities, private contractors or other institutions. ITR is normally performed by people outside of the study producing District with the preference to have the ITR Team lead from another Division if possible. The key factor is extensive, expert knowledge in

their field of expertise. DrChecks document review and comment software will be used to document the ITRs.

The relevant National Planning Center of Expertise, in this case for Deep Draft Navigation (DDNPCX), has ultimate responsibility for accomplishing ITR. The DDNPCX is requested to form an ITR Team, and to conduct ITR of the Draft and Final Reports.

Also, a Cost Estimating Directory of Expertise (Cost Dx), at the Corps Walla Walla District (NWW) is responsible for reviewing the completed draft report. The DDNPCX is requested, herein, to coordinate cost estimation review with the Cost Dx. The working assumption is that the DDNPCX would secure Cost Dx approval of the proposed cost estimating reviewer, and that the Draft Report review would apply the proper Cost Dx-provided checklist. The completed checklist would be returned to the Cost Dx for approval.

Technical disciplines determined to be appropriate for review of the draft and final reports, at a minimum, include: plan formulation, economics, environmental/NEPA compliance, hydraulics and hydrology, geotechnical engineering, cost engineering, and real estate. SAJ and the DDNPCX will collaborate to produce detailed scopes of work prior to each review. All should be well-versed in conduct of deep draft navigation studies that potentially include both the deepening and widening of channels and all associated activities.

Preliminary cost estimates for the 4 ITRs are itemized as follows:

- FSM Briefing Materials \$15K (Completed)
- AFB Materials \$25K
- Draft Report \$35K
- Final Report \$25K

#### 6. EXTERNAL PEER REVIEW PLAN

In order to determine if external peer review is warranted for this particular project, an evaluation was conducted of the risk and magnitude of the proposed project, including consideration of whether or not study conclusions were based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or modes, present conclusions that are likely to change prevailing practices, or are likely to affect policy decisions that have a significant impact, as called for in EC 1105-2-408, Section 4.b.

# **External Peer Review Requirement Determination**

The Jacksonville District opinion is that this project would be considered large, likely exceeding \$45M in total cost. Magnitude of the project triggers the requirement for

external peer review. EPR will be conducted on the draft report. Detailed scope of the EPR will be determined in advance of the review. Preliminarily, the cost of EPR is anticipated to be approximately \$100K.

Evaluations of individual decision criteria are provided below, in support of the abovestated opinion.

# Unusually high risk or magnitude indicated?

The proposed project does not appear to include risks that are greater than normally would be expected for a deep draft navigation project. However, the total cost, projected to exceed \$45M, would be considered high magnitude.

# Study conclusions based upon novel methods?

Hydraulic and economic evaluations employ methods typical of a deep draft navigation project, and would not appear to warrant external peer review on this basis.

# Study conclusions present complex challenges for interpretation?

Interpretation challenges, for this project, are typical of that for a deep draft navigation project and are not expected to present complex challenges for interpretation.

### Study conclusions contain precedent-setting methods or modes?

Well established analytical methods and modes will be employed and are not considered precedent-setting.

# Study conclusions likely to change prevailing practices?

Study conclusions are expected to be typical of a Florida deep draft navigation project and are not expected to change prevailing practices.

# 7. ADDITIONAL REVIEW CONSIDERATIONS

### **Public and Agency Comment and Dissemination**

Public involvement is anticipated throughout the preparation of the Decision Document. Public information meetings are conducted to inform the general public, other federal and state agencies and interested stakeholders of the status of the project and alternatives being considered. At a minimum, public meetings have, or will be conducted as part of the National Environment Policy Act (NEPA) compliance process, including: Public scoping meetings and the public review period of the Draft Environmental Impact Statement, anticipated for 2010.

# 8. CONSOLIDATED SCHEDULE

- ITR of FSM Package (Completed 18 Oct 07)
- ITR of AFB Package (2009)
- ITR of Draft Report
- Public Review and EPR of Draft Report (2010)
- ITR of Final Report (2010)
- Submission of final report to HQ for final review and approval (June 2011)

# 9. POINTS OF CONTACT

Due to confidentiality law requirements with posting documents on websites for public review, only the Project Manager is listed as the point of contact for any questions concerning this Peer Review Plan and qualifications of members of the PDT team:

Title	Telephone	Email
Project Manager	904-232- 1363	Click here to email Project Manager

Figure 1. Project Location



Figure 2. Existing Federal Project

